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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/586,526

06/06/2007

Stein Egil Oserod

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JACOBSON HOLMAN PLLC  
400 SEVENTH STREET N.W.  
SUITE 600  
WASHINGTON, DC 20004

EXAMINER

LITHGOW, THOMAS M

ART UNIT

PAPER NUMBER

1778

MAIL DATE

DELIVERY MODE

10/12/2011

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/586,526	<b>Applicant(s)</b> OSEROD, STEIN EGIL	
	<b>Examiner</b> THOMAS M. LITHGOW	<b>Art Unit</b> 1778	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2011.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 5) ☒ Claim(s) 1-15 is/are pending in the application.
- 5a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 6) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 7) ☒ Claim(s) 1-15 is/are rejected.
- 8) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 9) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 19 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO 943) | Paper No.(s)/Mail Date: ____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: ____   | 6) <input type="checkbox"/> Other: ____                           |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-12 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/41965 and further in view of Weingarten (US 5570744). WO '965 discloses every aspect of claim 1, (see fig. 3) except the use of "at least two separators". The use of plural centrifugal based oil/water/gas separators (either in series or parallel [11,17+]) at the well head of a petroleum well is taught by Weingarten '744. As is well known, the well head fluid composition changes as the well ages with the well head fluid containing a higher percentage of water in its latter age. The WO '965 device is originally made to handle a oil/water/gas composition which is slightly higher in water and leaner in oil and gas based on the disclosure of WO '965. So it stands to reason that as the well ages the well head fluid approaches the composition of the water already being treated in WO '965. The instant rejection does not rely on the specifics of the Weingarten '744

separators per se, but merely as a teaching to illustrate that similarly designed centrifugal oil-water-gas separators are organized in plural serial or parallel arrangements to separate the various process streams into individual oil, water and gas streams. The fact that Weingarten '744 discloses a centrifugal separator that is a flow-through type (no "backflow"- as in applicant's separator) is largely irrelevant as the specifics of the separator are taught by WO '965. As noted above, WO '965 teaches every aspect of a single separator including the injection of gas prior to the separator [13, 6+], the specifics of the separator tank including the outlets for oil, water gas and solids- (see fig. 3), and the presence of the device at the well head [6,6].

3. Claims 4 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claims 1 and 11 above, and further in view of any one of Bibaeff (US 4800025) or Edmondson (US 5484534) or Jackson (US 4094783) or Cairo (US 5516434). All four secondary references employ recycling gas from a separator unit to a gas injection step feeding to an oil flotation separator to facilitate the flotation effect of having bubbles interact with hydrophobic oil to float it to the top of the tank as in applicant's device and as in the WO '965 device. Claim 4, a

“system” claim, does not structurally define over claim 1 and as such is properly rejected in the prior rejection above.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claim 1 above, and further in view of either one of Bibaeff '025 or Brown (US 2730190). The use of hydrocarbon containing gas for oil-water flotation units is well known as taught by Bibaeff '025 [7, 45+] or Brown [16, 15+]. Its use reduces air pollution (of unburnt HC gas) and facilitates the flotation separation.

### ***Response to Arguments***

5. Applicant's arguments filed 7-7-2011 have been fully considered but they are not persuasive. Applicant's remarks are addressed in the body of the rejection.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a

first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS M. LITHGOW whose telephone number is (571)272-1162. The examiner can normally be reached on Mon. -Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on 571-272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/THOMAS M LITHGOW/

Primary Examiner, Art Unit 1778

THOMAS M LITHGOW  
Primary Examiner  
Art Unit 1778

TML